



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

AUG 1 2001

DOT-E 7891
(THIRTEENTH REVISION)

EXPIRATION DATE: June 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109.)

1. GRANTEE: Sigma Chemical Company
St. Louis, MO

(See Appendix A of this exemption for list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of specially designed combination packagings described herein for transportation in commerce of the materials listed in paragraph 6 without hazard labels or placards, with quantity limits not exceeding one liter for liquids or 2.85 kilograms for solids. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.13(a) in that Division 5.2 and toxic by inhalation (TIH) materials are included; § 173.13(b) in that passenger-carrying aircraft is authorized for certain materials; and § 173.13(c) (1) (ii) in that absorbent material may be placed inside the inner barrier bag.
5. BASIS: This exemption is based on the application of Sigma Chemical Company dated September 29, 2000, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):**AUG 1 2001**

Hazardous Material Description ¹	Hazard Class/ Division	Identification Number	Packing Group
Flammable, liquids	3	As Appropriate	I, II or III
Flammable solids ^{2,3}	4.1	As Appropriate	II or III
Pyrophoric materials ⁴	4.2	As Appropriate	I
Self heating materials ³	4.2	As Appropriate	II or III
Dangerous When Wet materials	4.3	As Appropriate	I, II or III
Oxidizers ⁴	5.1	As Appropriate	I, II or III
Organic peroxides ^{2,3}	5.2	As Appropriate	II
Toxic materials ⁴	6.1	As Appropriate	I, II or III
Corrosive materials	8	As Appropriate	I, II or III
Miscellaneous hazardous materials	9	As Appropriate	II or III

1 - Only hazardous materials permitted to be transported aboard a passenger-carrying aircraft by column (9A) of the Hazardous Materials Table in § 172.101 are authorized for transport aboard passenger-carrying aircraft; only hazardous materials permitted to be transported aboard a cargo aircraft by column (9B) of the Hazardous Materials Table in § 172.101 are authorized for transport aboard cargo-only aircraft.

2 - Excludes Type A, B and C materials.

3 - Excludes materials which require temperature control.

4 - As restricted by paragraphs 7.c and 7.d.

7. SAFETY CONTROL MEASURES:

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a. PACKAGING - Packagings manufactured under the 12th Revision of this exemption prior to October 31, 2001 are authorized for continued use. However, no new manufacture is authorized after October 31, 2001. Packagings manufactured after October 31, 2001 must meet one of the following configurations:

(1) Liquid hazardous material must be placed in a tightly closed glass, metal or plastic inner packaging(s) with a total capacity not exceeding 1.2 liters in volume per completed package. The inner packaging(s) must be sealed and must be compatible with the product. Inner packaging(s) must have sufficient outage so that they will not become liquid full at 55°C. The net quantity (measured at 20°C) in the inner packaging(s) may not exceed one liter;

(2) Solid hazardous material must be placed in a tightly closed glass, metal or plastic inner packaging(s). The net quantity of material in the inner packaging(s) may not exceed 2.85 kilograms. The inner packaging(s) must be sealed and must be compatible with the product;

(3) Inner packaging(s) containing liquid, pyrophoric material, or dangerous when wet material must be:

(i) Surrounded by non-reactive absorbent material, in sufficient quantity to completely absorb the entire contents of the inner packaging(s) and placed into a hermetically sealed (e.g., goose-necked and tied, heat sealed, etc.) barrier bag (4 mils minimum) which is impervious to the lading; or

(ii) Placed into a hermetically sealed barrier bag (4 mils minimum) which is impervious to the lading and surrounded by non-reactive absorbent material in sufficient quantity to completely absorb the entire contents of the inner packaging(s); and

(iii) Then be placed in a metal can with a sufficient quantity of non-reactive filler material to immobilize the inner packaging(s) and fill all void spaces;

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(iv) The metal can must be hermetically sealed for Division 4.2, 4.3 and TIH materials;

(4) The inner packaging from 7.a.(2) or 7.a.(3) must then be placed in a fiberboard box that is placed in a hermetically sealed barrier bag which is impervious to the lading.

(5) The intermediate packaging must then be placed inside an outer packaging conforming to § 173.201 for liquids or § 173.211 for solids. Up to four intermediate packagings may be placed into an outer package.

(6) All closures must be held securely in place by positive means.

b. TESTING -

(1) The completed package, assembled as for transportation and with the inner packaging(s) filled 98% full with liquid, must be successfully tested in accordance with 49 CFR Part 178 at the Packing Group I level.

(2) The metal can with inner packaging(s) filled 98% full, must be successfully tested in accordance with 49 CFR Part 178 at the Packing Group I level. In addition for TIH, and pyrophoric materials, the metal can must be capable of withstanding a pressure differential of 100 kPa.

c. ADDITIONAL SAFETY CONTROL MEASURES FOR A MATERIAL TOXIC BY INHALATION - The following provisions are applicable to materials meeting the definition of "material toxic by inhalation" in § 171.8 that are packaged in accordance with the requirements of this exemption:

(1) Each outside package must be marked "INHALATION HAZARD" in letters at least 12.0 mm (one-half inch) high on a contrasting background in close proximity to the marking specified in paragraph 8.g.

(2) Shipping papers must contain a notation "TOXIC INHALATION HAZARD" in addition to the shipping paper requirements of Subpart C of Part 172.

d. MATERIALS WHICH MAY NOT BE TRANSPORTED BY PASSENGER-CARRYING AIRCRAFT -

- (1) Materials which meet the definition of "material poisonous (toxic) by inhalation" in § 171.8 (any zone).
- (2) Materials which meet the definition of oxidizer, at the Packing Group I level in accordance with § 173.127(b)(1)(i).

8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging(s) authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.
- b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.
- c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.
- e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.
- f. For transportation by aircraft, the completed package must be offered in conformance with § 173.27(c).

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g. MARKING and LABELING

(1) Each package shipped under this exemption must be marked "DOT-E 7891 - NO HAZARD LABELS REQUIRED" in letters at least 12.0 mm (one-half inch) high on a contrasting background in proximity to required DOT markings.

(2) Each package that is offered for transportation by aircraft which contains a material which is not authorized to be transported aboard a passenger-carrying aircraft by column (9A) of the Hazardous Materials Table in § 172.101 must bear a CARGO ONLY AIRCRAFT label.

(3) If the inner metal can is not capable of withstanding a pressure differential of 100 kPa, then the can must be marked in letters at least 6.0 mm (one-quarter inch) high on a contrasting background that the can is not suitable for TIH or Pyrophoric Materials.

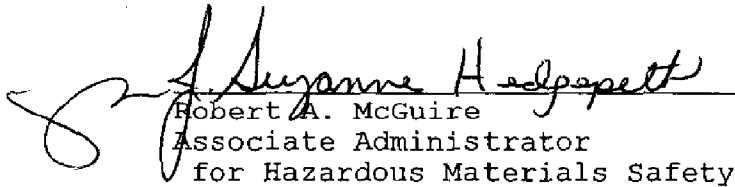
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo aircraft only with restrictions (see paragraph 6, note 1), and passenger-carrying aircraft with restrictions (see paragraph 6, note 1 and paragraph 7.d).
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued in Washington, D.C.


Robert A. McGuire
Associate Administrator
for Hazardous Materials Safety

AUG 1 2001
(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

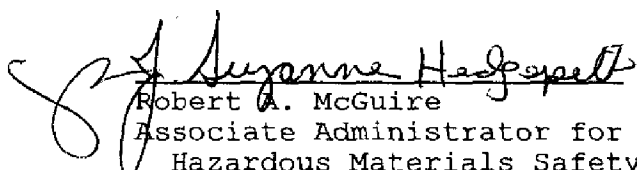
Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: RDT (2001)

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

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Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Aldrich Chemical Co. Milwaukee, WI	Sep 29, 2000	AUG 1 2001	Jun 30, 2002
Spectrum Quality Products, Inc. Gardena, CA	Aug 15, 2000	Sep 14, 2000	Jun 30, 2002
Fisher Scientific Company, L.L.C. Pittsburgh, PA	Jun 8, 2000	Jul 11, 2000	Jun 30, 2002
Supelco Bellefonte, PA	Sep 29, 2000	AUG 1 2001	Jun 30, 2002


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